Figure 1

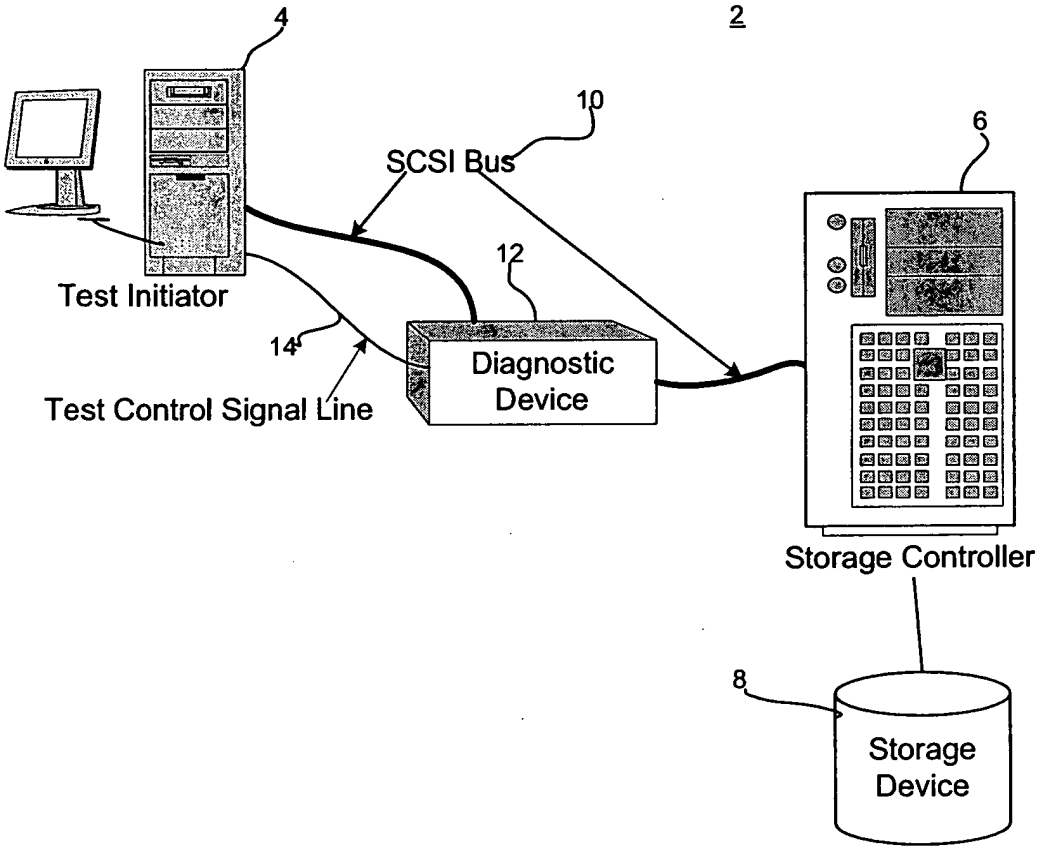

4
2
10
SCSI Bus
6
12
Test Initiator
14
Diagnostic Device
Test Control Signal Line
Storage Controller
8
Storage Device

FIG. 2

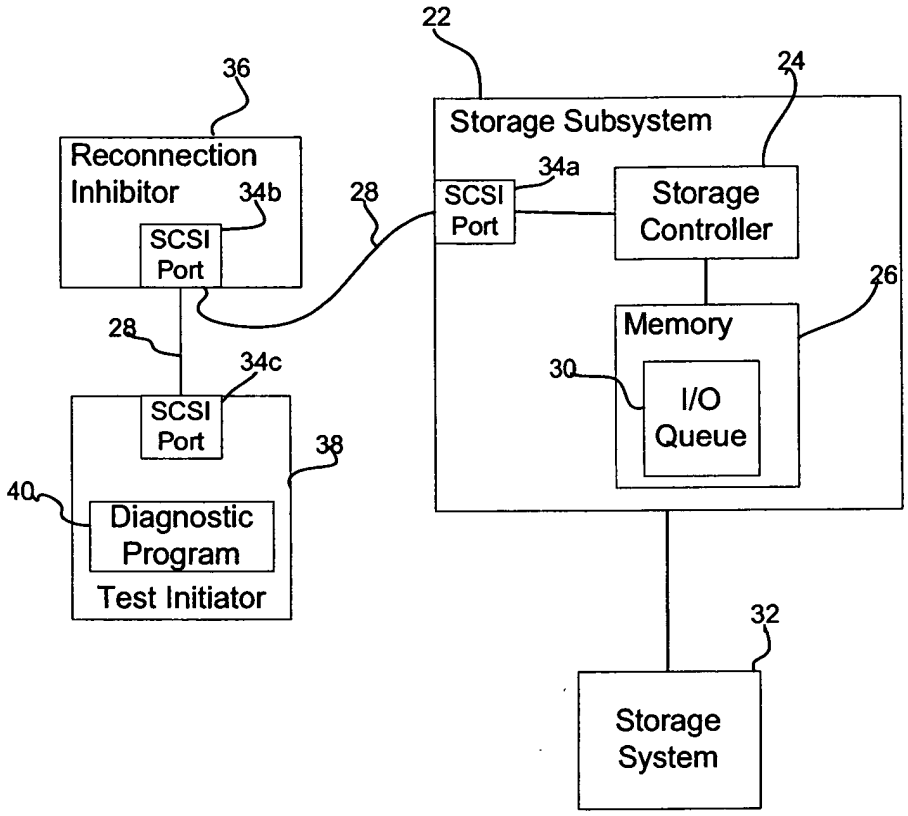

22
36
24
Storage Subsystem
Reconnection Inhibitor
34b
28
SCSI Port
34a
SCSI Port
Storage Controller
26
28
Memory
34c
30
SCSI Port
I/O Queue
38
40
Diagnostic Program
Test Initiator
32
Storage System

FIG. 3

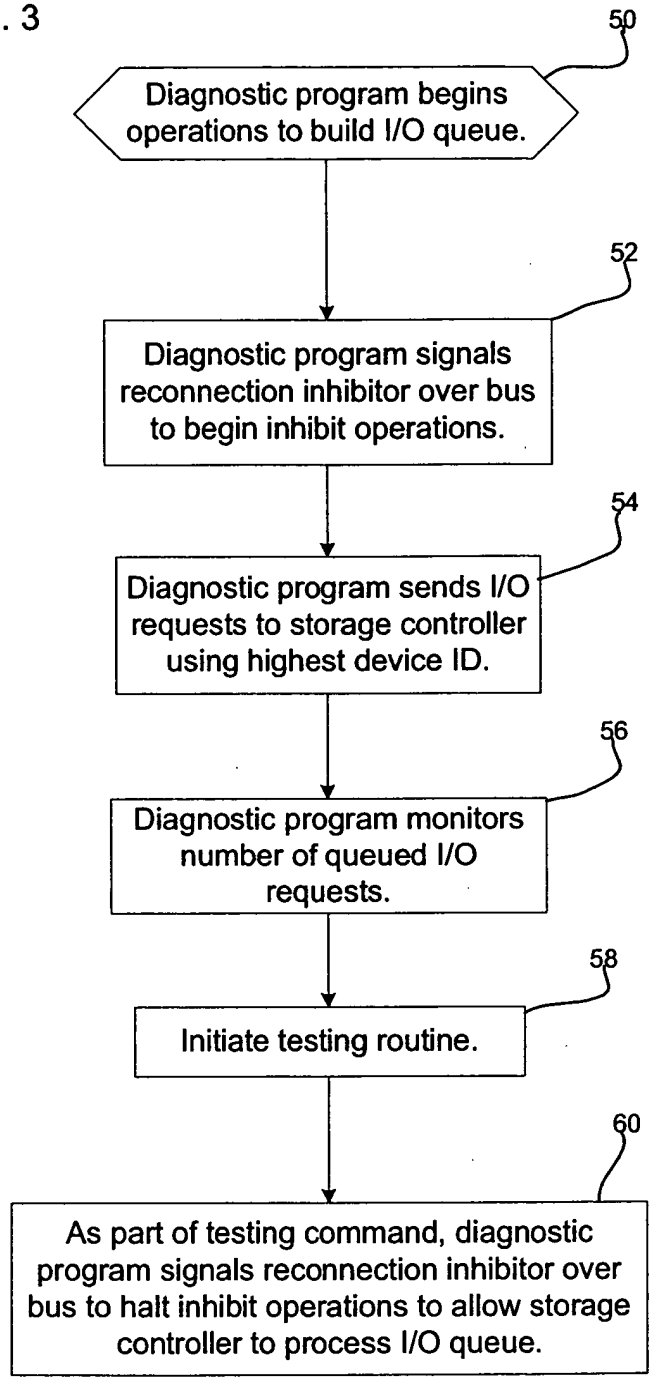

50
Diagnostic program begins operations to build I/O queue.
52
Diagnostic program signals reconnection inhibitor over bus to begin inhibit operations.
54
Diagnostic program sends I/O requests to storage controller using highest device ID.
56
Diagnostic program monitors number of queued I/O requests.
58
Initiate testing routine.
60
As part of testing command, diagnostic program signals reconnection inhibitor over bus to halt inhibit operations to allow storage controller to process I/O queue.

FIG. 4

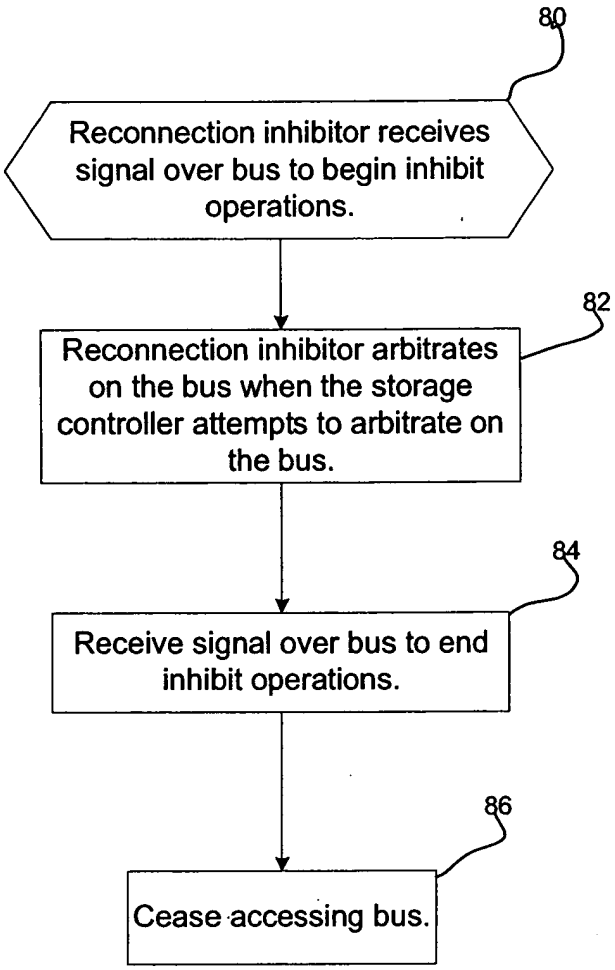

80
Reconnection inhibitor receives signal over bus to begin inhibit operations.
82
Reconnection inhibitor arbitrates on the bus when the storage controller attempts to arbitrate on the bus.
84
Receive signal over bus to end inhibit operations.
86
Cease accessing bus.

FIG.5

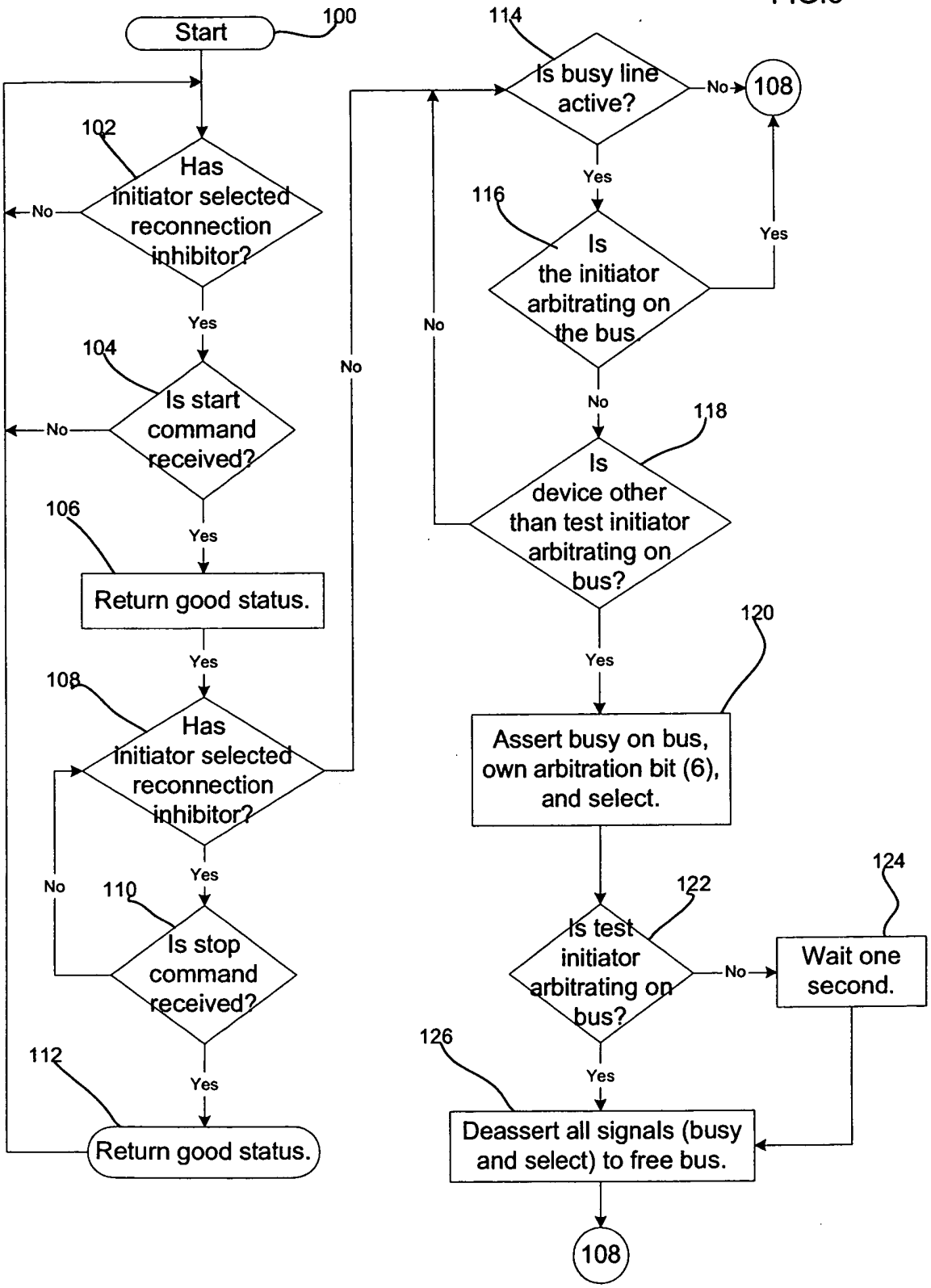
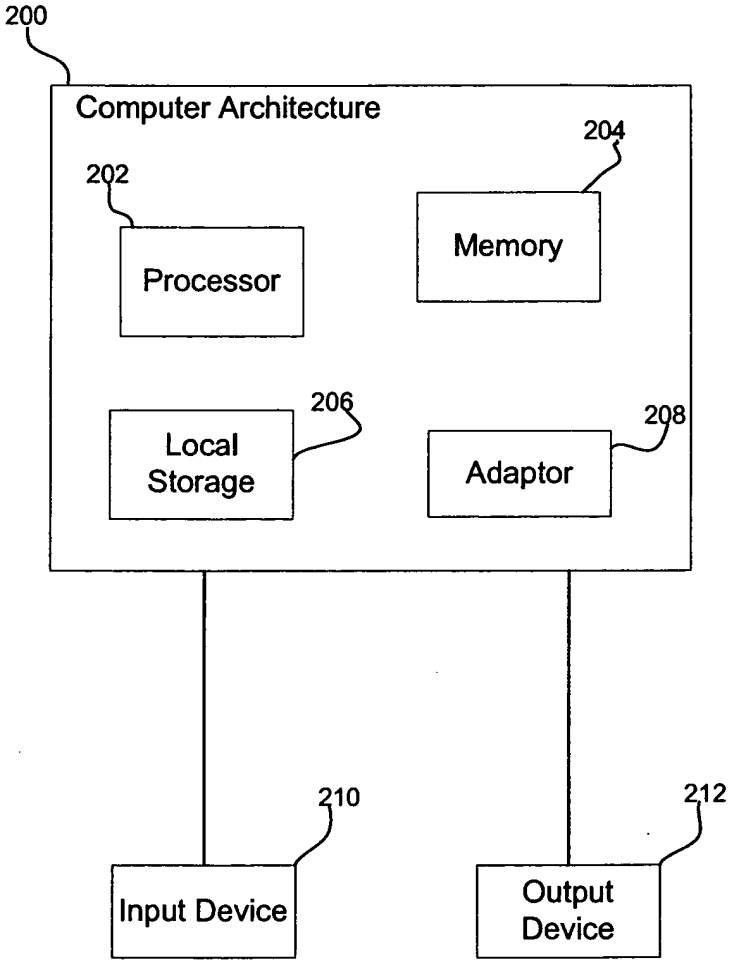

Start
100
102
Has initiator selected reconnection inhibitor?
No
Yes
104
Is start command received?
No
Yes
106
Return good status.
Yes
108
Has initiator selected reconnection inhibitor?
No
Yes
110
Is stop command received?
No
Yes
112
Return good status.
114
Is busy line active?
No
108
Yes
116
Is the initiator arbitrating on the bus
Yes
No
No
118
Is device other than test initiator arbitrating on bus?
No
Yes
120
Assert busy on bus, own arbitration bit (6), and select.
122
Is test initiator arbitrating on bus?
No
124
Wait one second.
Yes
126
Deassert all signals (busy and select) to free bus.
108

FIG. 6


200
Computer Architecture
202
Processor
204
Memory
206
Local Storage
208
Adaptor
210
Input Device
212
Output Device